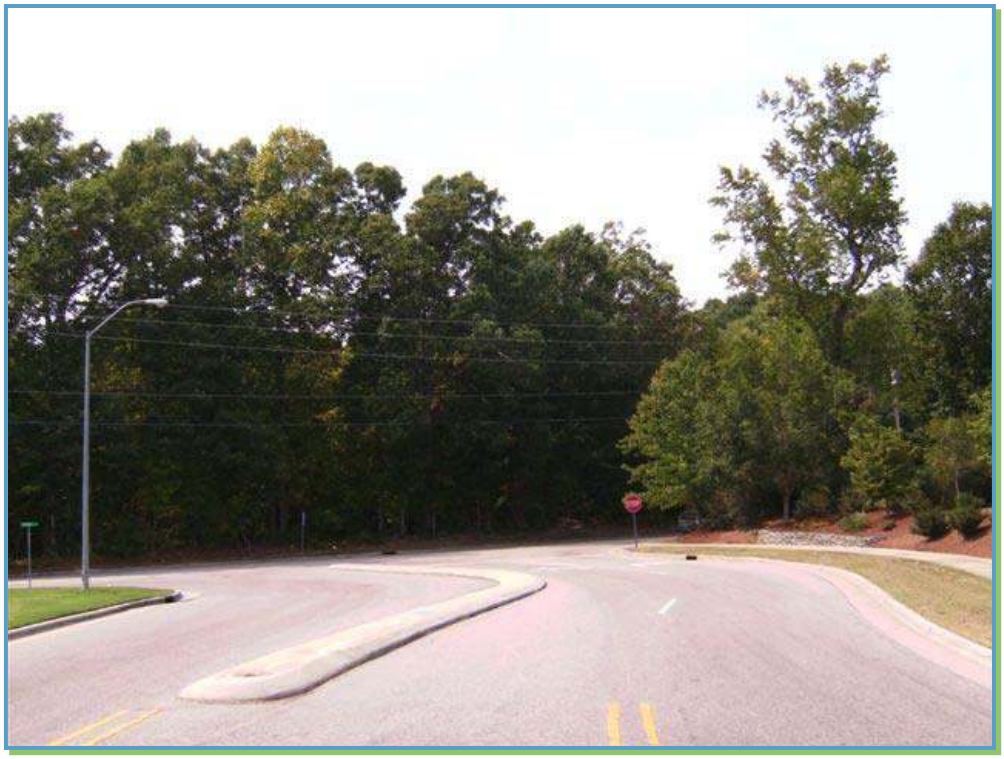
FINAL
SIGNAL WARRANT ANALYSIS

Hodge Road and Mingo Bluff Boulevard
Knightdale, North Carolina



Prepared For:
Town of Knightdale
950 Steeple Square Court
Knightdale, North Carolina 27545

ENGINEERS
PLANNERS
ECONOMISTS
WilburSmith
ASSOCIATES

Submitted: December 21, 2007
WSA # 102059

FINAL

TRAFFIC SIGNAL WARRANTS ANALYSIS

For

Hodge Road and Mingo Bluff Boulevard

Knightdale, North Carolina

Prepared For:

Town of Knightdale
950 Steeple Square Court
Knightdale, North Carolina 27545

Prepared By:

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Raleigh, NC 27601
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December 21, 2007

(WSA Project No. 102059)

Table of Contents

LIST OF TABLES

LIST OF FIGURES

APPENDICES

Introduction

A traffic signal warrants analysis has been conducted for the intersection of Hodge Road and Mingo Bluff Boulevard in Knightdale, North Carolina. Data collected at the site has been compared to the guidelines set forth in the ***Manual on Uniform Traffic Control Devices (MUTCD)***[1]. The *Manual* describes eight warrants to be considered as justifying criteria necessary to be met before a traffic signal installation should be approved. The eight warrants are listed as follows:

Table 1
MUTCD Signal Warrants

Warrant 1 -	Eight-Hour Vehicular Volume
Warrant 2 -	Four-Hour Vehicular Volume
Warrant 3 -	Peak Hour
Warrant 4 -	Pedestrian Volume
Warrant 5 -	School Crossings
Warrant 6 -	Coordinated Signal System
Warrant 7 -	Crash Experience
Warrant 8 -	Roadway Network

The installation of a traffic signal must improve the overall safety and/or operation of the intersection. Satisfying one or more warrants alone does not in itself provide concrete justification to consider a signal. A thorough analysis that considers crash history, field conditions such as sight distances and speed limits, and good engineering judgment must all be considered before the installation of a traffic signal is proposed. As a part of the analysis performed, WSA examined crash data for the corridor from 2004-2007 to identify any high crash locations that could be easily remedied.

Background

The intersection of Hodge Road and Mingo Bluff Boulevard in Knightdale lies just north of the Hodge Road / US-64 / US-264 Bypass interchange (See Figure 1). The intersection is currently unsignalized. Hodge Road Elementary school is located on the east side of Hodge Road and a currently undeveloped, wooded area is located on the west side. Significant residential and commercial developments are planned for the areas adjacent to this intersection. These are projected to increase traffic volumes along the area roadways, including Hodge Road.

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Existing Conditions

Hodge Road is a primary north-south thoroughfare in western Knightdale. In the vicinity of the project location, the roadway provides a 2-lane facility. The posted speed limit along Hodge Road is 45 mph. The land use that generally serves this area is residential.

Hodge Road looking north

Mingo Bluff Boulevard is a 2-lane roadway that provides access to the Hodge Road Elementary School and several residential developments. There is no posted speed limit along Mingo Bluff Boulevard.

Mingo Bluff Boulevard looking west

Methodology

In order to perform a traffic signal warrants analysis for the Hodge Road / Mingo Bluff Boulevard intersection, traffic data was collected and then compared to the **MUTCD**[1] warrants. Much of the analysis is based upon 16-hour turning movement and pedestrian traffic volumes counted by Wilbur Smith Associates on October 31, 2007 at the study intersection. Figure 2 illustrates the morning and afternoon peak hour traffic volumes as well as the total 16-hour traffic volumes. These counts are also included in the Appendix.

Most warrants described in the ***MUTCD*** consider the number of lanes on each approach to the intersection. The most restrictive of the thresholds in these warrants are based on a 2-lane approach intersecting another 2-lane approach. Due to the presence of left turn lanes on both Hodge Road and Mingo Bluff Boulevard, both streets were analyzed as having 2-lane approaches.

Crash data for the Hodge Road corridor between Poole Road and US64 Business was obtained from NCDOT for the period 2004-2007. A crash diagram was prepared to determine any areas of unusual crash history and is included as Figure 4. The raw crash data is included in the Appendix.

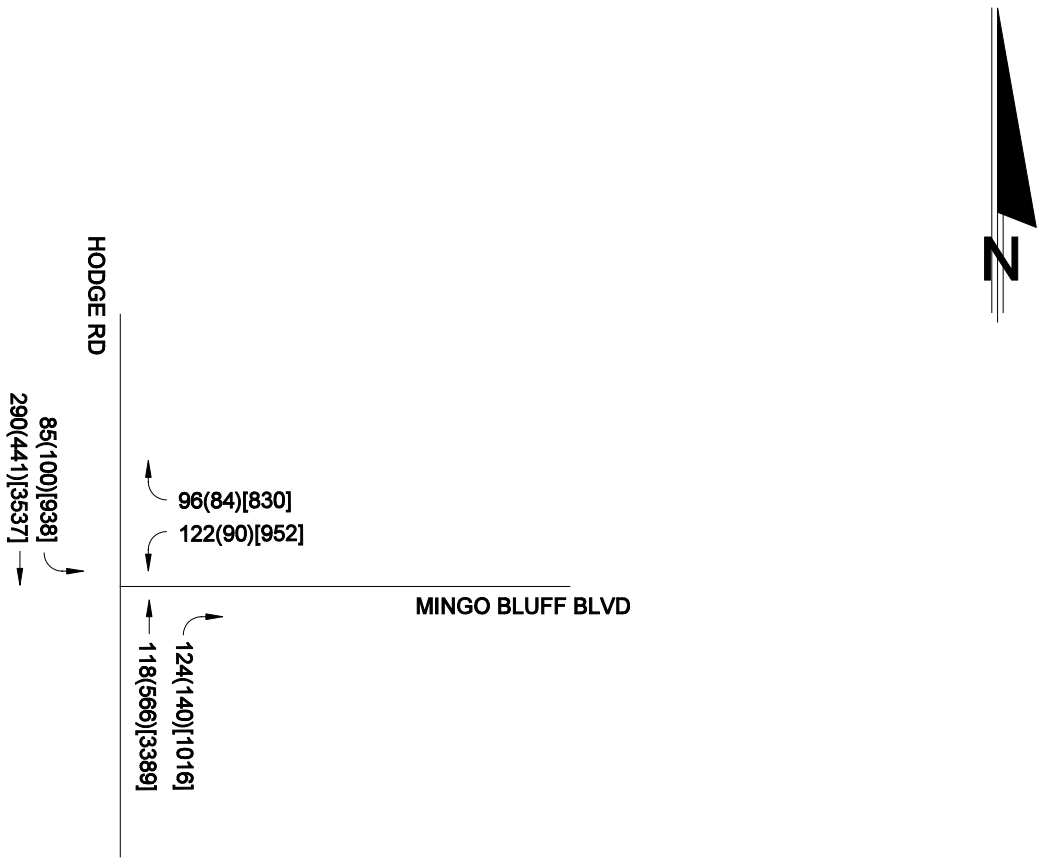
Results

Warrant 1 - ***Not Met***

Warrant 1 (Eight Hour Vehicular Volume) is intended for application at locations where a large volume of intersecting traffic is the principal reason to consider installing a traffic signal or where the traffic volume on a major street is so heavy that traffic on a minor intersecting street suffers excessive delay or conflict in entering or crossing the major street. Warrant 1 has two conditions but is intended to be treated as a single warrant. If either Condition A or B is satisfied, then the criteria for Warrant 1 is satisfied.

To meet the requirements for Warrant 1A (Minimum Vehicular Volume), the total number of vehicles per hour on the major street and the higher-volume minor street approaches should meet the required minimum volumes. At least 8 hours are needed to satisfy this warrant. At the Hodge Road / Mingo Bluff Boulevard intersection only 6 hours met this requirement; therefore Warrant 1A is not met.

To meet the requirements for Warrant 1B (Interruption of Continuous Traffic), the total number of vehicles per hour on the major street and the higher-volume minor street approaches should meet the required minimum volumes. At least 8 hours are needed to satisfy this warrant. Only 6 hours reached this requirement, and therefore Warrant 1B is not met.



LEGEND	
←	DIRECTIONAL MOVEMENT
XX	AM PEAK HOUR TRAFFIC
(XX)	PM PEAK HOUR TRAFFIC
[XX]	16 HOUR TRAFFIC

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HODGE RD / MINGO BLUFF BLVD
SIGNAL WARRANT ANALYSIS
KNIGHTDALE, NORTH CAROLINA

2007 EXISTING
TRAFFIC VOLUMES

FIGURE 2

SCALE:
NONE

Warrant 2 - *Met*

Warrant 2 (Four Hour Vehicular Volume) is intended to be applied where the volume of intersecting traffic is the principal reason to consider installing a traffic signal. To meet the requirements for Warrant 2, the total number of vehicles per hour on the major street and the higher-volume minor street approaches should meet the required minimum volumes. At least 4 hours are needed to satisfy this warrant. At the Hodge Road / Mingo Bluff Boulevard intersection, 4 hours met this requirement; therefore Warrant 2 is met.

Warrant 3 - *Met*

Warrant 3 (Peak Hour Vehicular Volume) is intended to be applied where traffic conditions are such that for a minimum of 1 hour of an average day, the minor street traffic suffers undue delay when entering the major street. This warrant is usually applied only in the vicinity of facilities that attract or discharge large numbers of vehicles over a short time. This warrant is applicable due to the proximity of the Hodge Road Elementary School. Warrant 3 has two conditions but is intended to be treated as a single warrant. If either Condition A or B is satisfied, then the criteria for Warrant 3 is satisfied.

To meet Warrant 3A, all of the following three conditions must be met for the same hour:

1. The total stopped time delay experienced by the traffic on the minor-street approach exceeds 5 vehicle-hours for a two-lane approach. The subject intersection does not meet this condition.
2. The volume on the same minor street approach equals or exceeds 150 vehicles per hour. The subject intersection meets this condition.
3. The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour. The subject intersection meets this condition.

To meet Warrant 3B the total number of vehicles per hour on the major street and the higher-volume minor street approaches should meet the required minimum volumes. At least 1 hour is needed to satisfy this warrant. At the Hodge Road / Mingo Bluff Boulevard intersection, 3 hours met this requirement; therefore Warrant 3B is met.

Warrant 4 – *Not Met*

Warrant 4 (Pedestrian Volume) is intended for application where the traffic volume on a major street is so heavy that pedestrians experience excessive delay in crossing the major street. To meet Signal Warrant 4, the pedestrian volume crossing the major street at an intersection or midblock location during an average day should be 100 or more for each of any 4 hours or 190 or more during any 1 hour, and there should be fewer than 60 gaps per hour in the traffic stream of adequate length to allow pedestrians to cross during the same period when the pedestrian volume criterion is satisfied. Despite the fact that Hodge Road Elementary School is

located at this intersection, no pedestrians were observed crossing Hodge Road or Mingo Bluff Boulevard, therefore this warrant is not met.

Warrant 5 – *Not Met*

Warrant 5 (School Crossing) is intended for application where the fact that school children cross the major street is the principal reason to install a traffic signal. To meet Signal Warrant 5 there must be a minimum of 20 students during the highest crossing hour across the major street. As with Warrant 4, no pedestrians were observed crossing at or near the intersection, therefore this warrant is not met

Warrant 6 – *Not Met*

Warrant 6 (Coordinated Signal System) is applicable in situations where a coordinated signal system necessitates the installation of a traffic control signal to maintain proper platooning of vehicles. As no coordinated signal system exists along this portion of Hodge Road, Warrant 6 is not met.

Warrant 7 – *Not Met*

Warrant 7 (Crash Experience) is intended for application where the severity and frequency of crashes are the principal reasons to consider installing a traffic control signal. For Signal Warrant 7 the **MUTCD**[1] states that to meet the warrant there must be a history of crashes at the subject intersection amounting to at least 5 crashes within the past year resulting in personal injury or property damage above the reporting thresholds. These crashes must also be of such a type that is correctable by the installation of a traffic signal. An adequate trial of alternatives must also have been attempted, along with increased enforcement. In addition to meeting these criteria, a certain amount of vehicular and pedestrian volumes must be present for 8 hours of the day. One crash (collision with an animal) was recorded along this section of roadway within a 3-year period; therefore the minimum criterion for Warrant 7 is not met.

Future Conditions

Based on information received from the Town of Knightdale Planning Department, there are several approved developments that are expected to add traffic to Hodge Road. These developments include:

- Food Lion Development at the intersection of Hodge Road and Poole Road
- Watson Tract at the intersection of Hodge Road and US 64 Business
- Langston Ridge Residential Development on the west side of Hodge Road south of Whitfield Street
- Panther Rock Subdivision on the west side of Hodge Road south of the US 64 Bypass

In addition to traffic from these specific developments, the TIA's performed in the area assumed that traffic along Hodge Road would grow approximately 3% per year. This is a reasonable

assumption based on the growth that is occurring in the area due to the opening of the US 64 Bypass.

In 2005, NCDOT counted 6,400 vehicles per day on Hodge Road just south of Mingo Bluff Boulevard. As shown in Figure 3, based on a 3% compounded growth, the 2025 Annual Average Daily Traffic (AADT) is estimated to be approximately 11,600 vehicles per day.

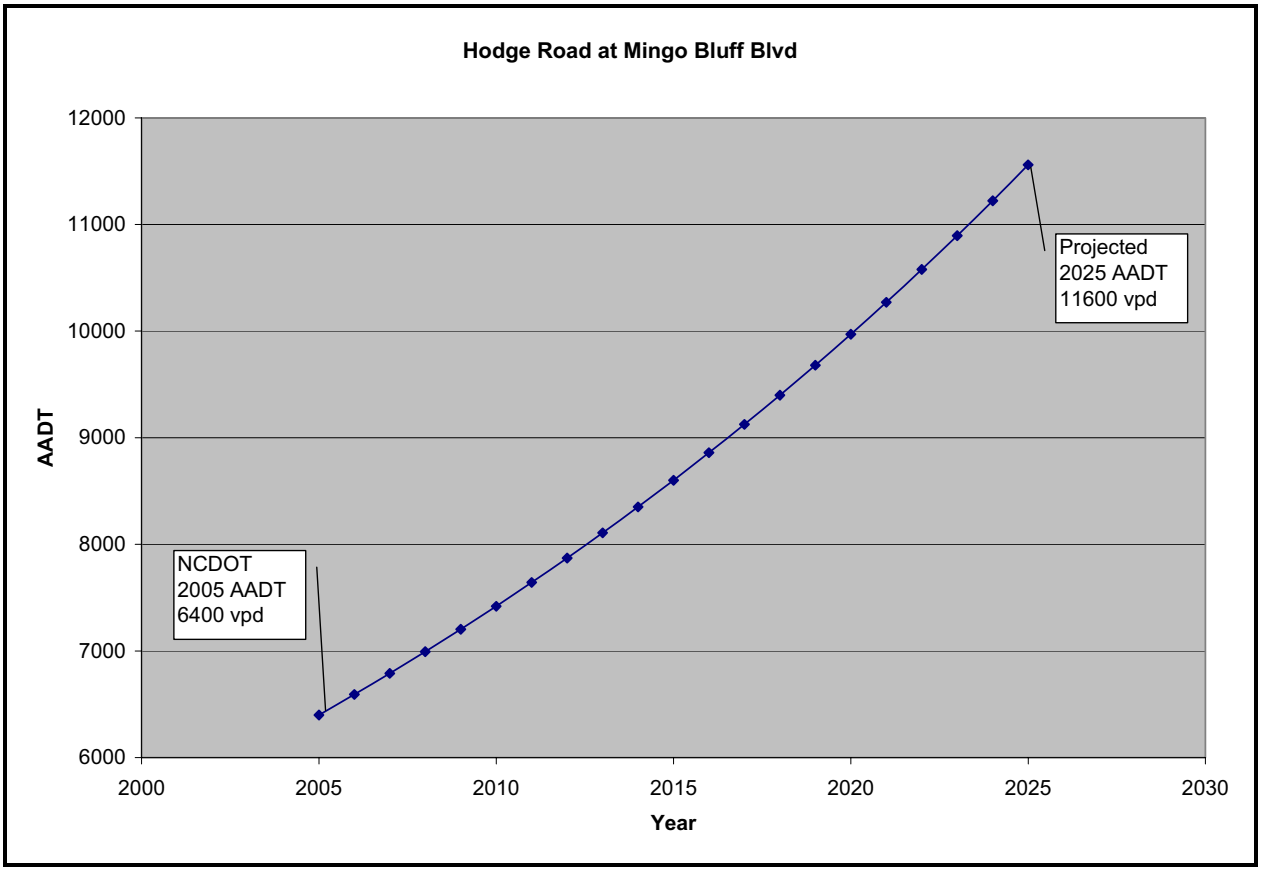


Figure 3: Estimated AADT on Hodge Road near Mingo Bluff Boulevard

Based on the expected increases in traffic volumes, it is reasonable to expect that Signal Warrants 2 (Four Hour Vehicular Volume) and 3 (Peak Hour Vehicular Volume) will continue to be met in the future as volumes grow along Hodge Road. In addition, Warrant 1 (Eight Hour Vehicular Volume) may be met as only 2 more hours are needed to satisfy conditions 1A or 1B.

As future developments are built along Hodge Road, sidewalks should be included with these developments. The provision of these sidewalks will likely encourage parents and children to walk to school rather than drive.

Crash Analysis

To determine if there are any major crash problems on the Hodge Road corridor from Poole Road to US 64 Business, WSA requested crash data from NCDOT for the past three years. Figure 4 provides a crash diagram of the crashes that were reported during this time period.

As expected, due to the high traffic volumes, the intersections of Hodge Road and Poole Road and Hodge Road and US 64 Business have the highest frequency of crashes. The improvements currently under construction at the Hodge Road / Poole Road intersection may help improve the safety of this intersection. Similarly, the new configuration of the Hodge Road / US 64 Business intersection and the reduction of traffic on US 64 Business due to the opening of the US 64 Bypass may eliminate some of the crashes experienced at this intersection.

The intersection of Hodge Road and Merlin Drive experienced 8 collisions over the past three years. An inspection of this intersection indicates that motorists may not have adequate sight distance, particularly entering or crossing Hodge Road in the westbound direction. WSA recommends that the Town ensure that the right –of-way remains clear in this area, particularly in the southeast quadrant of the intersection.

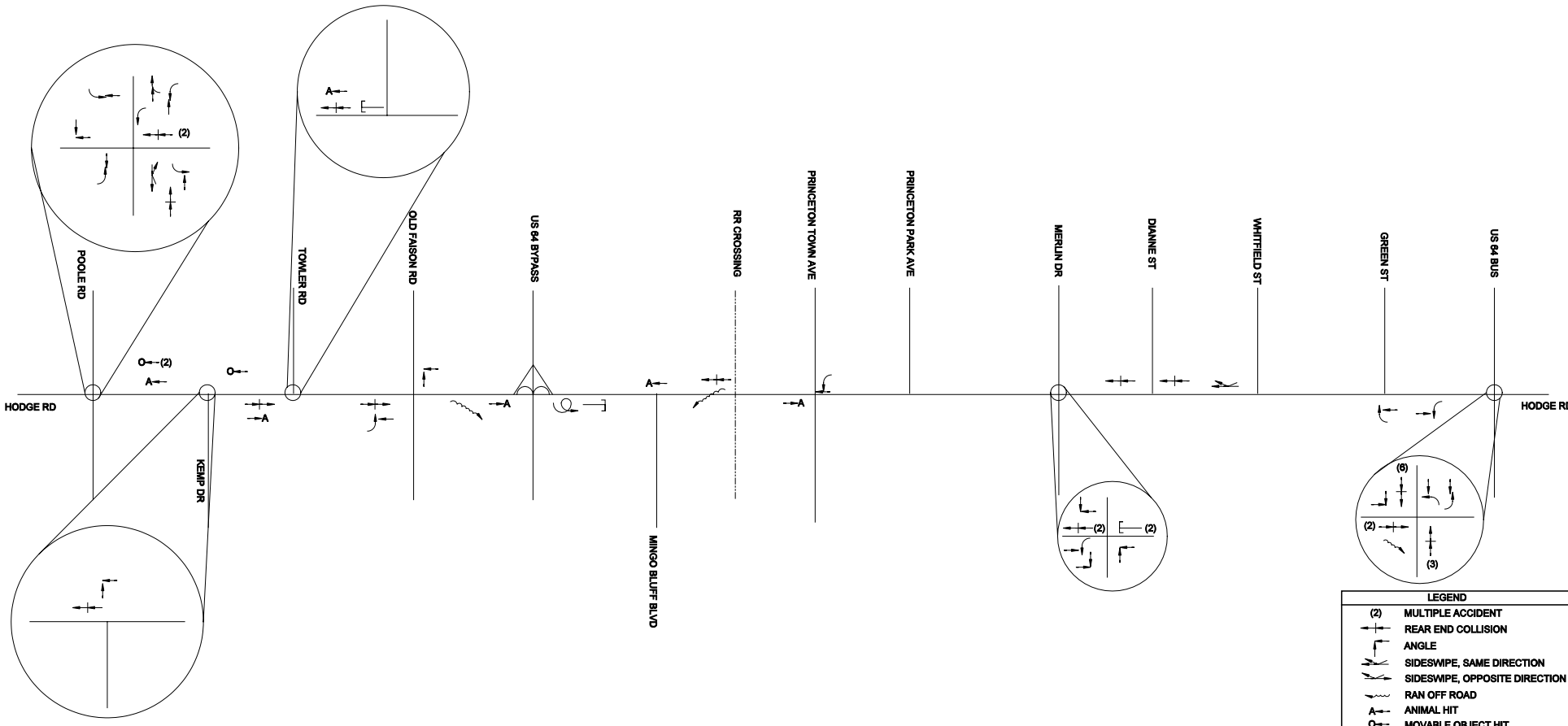
Looking south along Hodge Road at Merlin Drive

Looking north along Hodge Road at Merlin Drive

No other intersections along the corridor appeared to have a major crash problem within the past three years.

Recommendations

The satisfaction of a warrant is not in itself justification for a signal. The installation of a signal must improve safety and/or alleviate excessive delay under average daily conditions. Overall, this analysis shows that the Hodge Road / Mingo Bluff Boulevard intersection currently meets the criteria set forth in the ***MUTCD***[1] for both the Four Hour Vehicular Volume and Peak Hour Vehicular Volume warrants. Currently, all other Warrants are not met. However, upon



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HODGE RD / MINGO BLUFF BLVD
SIGNAL WARRANT ANALYSIS
KNIGHTDALE, NORTH CAROLINA

HODGE ROAD
CRASH LOCATION
DIAGRAM

FIGURE:
4

completion of approved and potential developments in the area, as well as general growth in Knightdale, it is reasonable to expect that the traffic along Hodge Road will further increase, possibly meeting other warrants in the future. Based on current traffic volumes meeting two signal warrants and the expected growth in traffic along Hodge Road, WSA recommends that a traffic signal be considered at this location at this time. The addition of the new Knightdale Fire Department on Mingo Bluff Boulevard may necessitate consideration of addition of emergency vehicle preemption when this traffic signal is installed. Additionally pedestrian signals with push-button activation should be included for use by pedestrians as the east and west sides of Hodge Road develop.

While not currently necessary, with the installation of a signal, additional improvements would be realized through the construction of a northbound right turn lane. A northbound right turn lane would allow for northbound right turning vehicles to freely flow when the westbound traffic has a green light.

To encourage pedestrian activity in the area, WSA recommends that the Town require developers to construct sidewalks along Hodge Road in front of their developments, as was required for the Princeton Manor subdivision.

Finally, WSA recommends that the Town ensure that the right–of-way remains clear at this intersection, as well as the Hodge Road at Merlin Drive intersection, particularly in the southeast quadrants of both intersections.

References

[1]***Manual on Uniform Traffic Control Devices (MUTCD),*** USDOT/FHWA, 2003.

Appendix A

TRAFFIC DATA

Wilbur Smith Associates

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Raleigh, NC 27601

File Name : HodgeRd_MingoBluffBlvd
Site Code : 00000002
Start Date : 10/31/2007
Page No : 1

Groups Printed- Cars and Trucks

	Hodge Road From North				Mingo Bluff Blvd From East				Hodge Road From South				From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
06:00 AM	0	31	4	35	8	0	7	15	1	6	0	7	0	0	0	0	57
06:15 AM	0	25	5	30	8	0	17	25	3	14	0	17	0	0	0	0	72
06:30 AM	0	37	5	42	3	0	22	25	12	27	0	39	0	0	0	0	106
06:45 AM	0	40	5	45	10	0	24	34	8	28	0	36	0	0	0	0	115
Total	0	133	19	152	29	0	70	99	24	75	0	99	0	0	0	0	350
07:00 AM	0	74	10	84	13	0	24	37	8	23	0	31	0	0	0	0	152
07:15 AM	0	81	12	93	15	0	23	38	20	24	0	44	0	0	0	0	175
07:30 AM	0	84	16	100	16	0	21	37	41	29	0	70	0	0	0	0	207
07:45 AM	0	65	20	85	27	0	41	68	34	32	0	66	0	0	0	0	219
Total	0	304	58	362	71	0	109	180	103	108	0	211	0	0	0	0	753
08:00 AM	0	60	37	97	38	0	37	75	29	33	0	62	0	0	0	0	234
08:15 AM	0	47	11	58	20	1	18	39	22	52	0	74	0	0	0	0	171
08:30 AM	0	51	3	54	8	0	19	27	7	28	0	35	0	0	0	0	116
08:45 AM	0	43	6	49	8	0	8	16	6	49	0	55	0	0	0	0	120
Total	0	201	57	258	74	1	82	157	64	162	0	226	0	0	0	0	641
09:00 AM	0	45	10	55	4	0	9	13	7	38	0	45	0	0	0	0	113
09:15 AM	0	22	5	27	10	0	14	24	7	27	0	34	0	0	0	0	85
09:30 AM	0	29	1	30	9	0	9	18	10	20	0	30	0	0	0	0	78
09:45 AM	0	29	1	30	5	0	4	9	10	22	0	32	0	0	0	0	71
Total	0	125	17	142	28	0	36	64	34	107	0	141	0	0	0	0	347
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10:15 AM	0	27	6	33	5	0	7	12	10	31	0	41	0	0	0	0	86
10:30 AM	0	29	7	36	6	0	6	12	9	32	0	41	0	0	0	0	89
10:45 AM	0	24	7	31	8	0	5	13	5	26	0	31	0	0	0	0	75
Total	0	112	24	136	28	0	23	51	32	116	0	148	0	0	0	0	335
11:00 AM	0	21	4	25	4	0	3	7	9	22	0	31	0	0	0	0	63
11:15 AM	0	28	8	36	10	0	7	17	3	31	0	34	0	0	0	0	87
11:30 AM	0	31	5	36	8	0	7	15	2	29	0	31	0	0	0	0	82
11:45 AM	0	28	9	37	6	0	6	12	2	34	0	36	0	0	0	0	85
Total	0	108	26	134	28	0	23	51	16	116	0	132	0	0	0	0	317
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01:15 PM	0	36	9	45	6	0	7	13	2	32	0	34	0	0	0	0	92
01:30 PM	0	28	7	35	3	0	8	11	5	26	0	31	0	0	0	0	77
01:45 PM	0	63	14	77	14	0	16	30	9	49	0	58	0	0	0	0	165
Total	0	154	35	189	34	0	35	69	19	133	0	152	0	0	0	0	410
02:00 PM	0	64	16	80	16	0	19	35	13	57	0	70	0	0	0	0	185
02:15 PM	0	71	26	97	17	0	18	35	19	66	0	85	0	0	0	0	217
02:30 PM	0	69	36	105	21	0	19	40	31	75	0	106	0	0	0	0	251
02:45 PM	0	72	34	106	47	0	45	92	45	84	0	129	0	0	0	0	327
Total	0	276	112	388	101	0	101	202	108	282	0	390	0	0	0	0	980
03:00 PM	0	82	27	109	42	0	49	91	40	78	0	118	0	0	0	0	318
03:15 PM	0	73	28	101	21	0	35	56	26	80	0	106	0	0	0	0	263
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Total	0	302	105	407	111	0	159	270	110	330	0	440	0	0	0	0	1117

Wilbur Smith Associates

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File Name : HodgeRd_MingoBluffBlvd
Site Code : 00000002
Start Date : 10/31/2007

Groups Printed- Cars and Trucks

	Hodge Road From North				Mingo Bluff Blvd From East				Hodge Road From South				From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	83	20	103	20	0	18	38	24	95	0	119	0	0	0	0	260
04:15 PM	0	102	26	128	20	0	15	35	22	106	0	128	0	0	0	0	291
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Total	0	384	89	473	84	0	86	170	125	510	0	635	0	0	0	0	1278
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06:30 PM	0	85	35	120	21	0	14	35	30	100	0	130	0	0	0	0	285
06:45 PM	0	79	24	103	20	0	14	34	25	88	0	113	0	0	0	0	250
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07:45 PM	0	71	14	85	7	0	6	13	11	58	0	69	0	0	0	0	167
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Grand Total	0	3537	938	4475	830	1	952	1783	1016	3389	0	4405	0	0	0	0	10663
Apprch %	0	79	21		46.6	0.1	53.4		23.1	76.9	0		0	0	0		
Total %	0	33.2	8.8	42	7.8	0	8.9	16.7	9.5	31.8	0	41.3	0	0	0	0	

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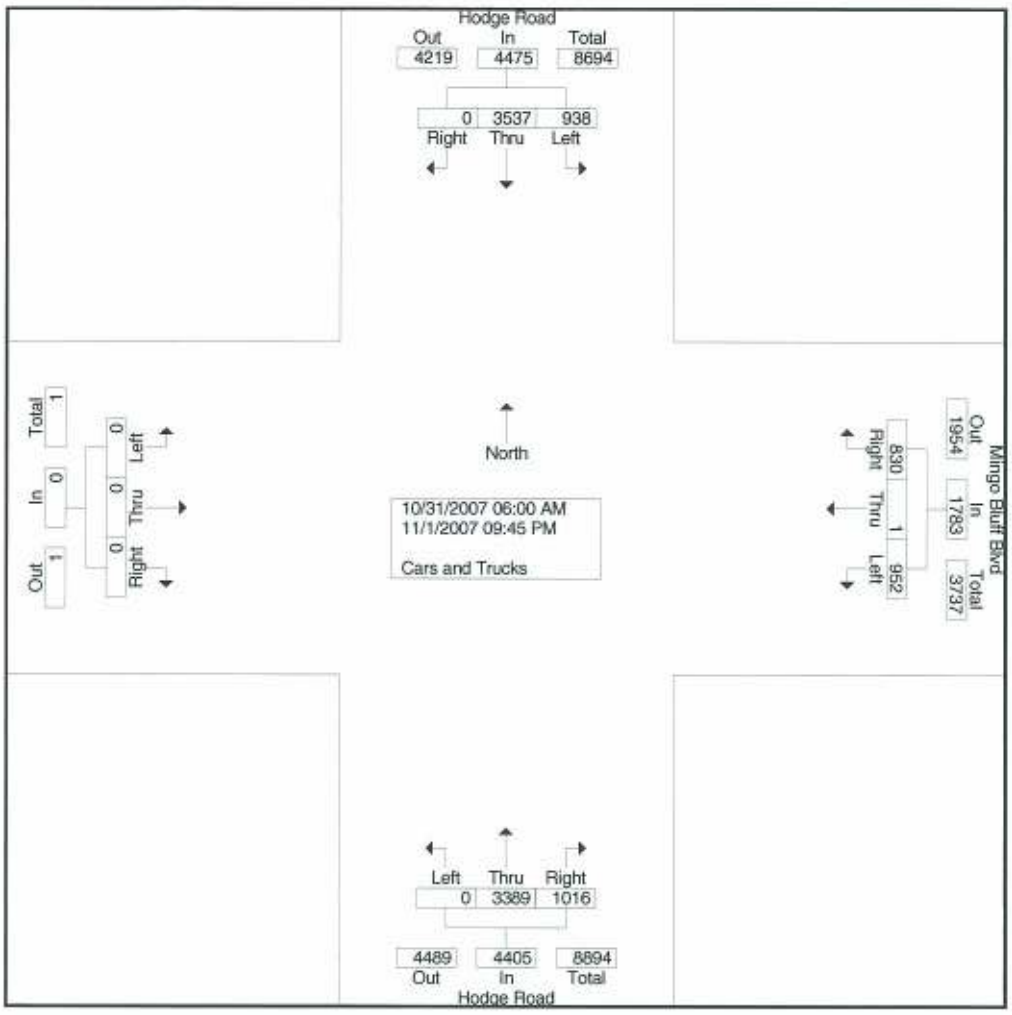
Start Date : 10/31/2007



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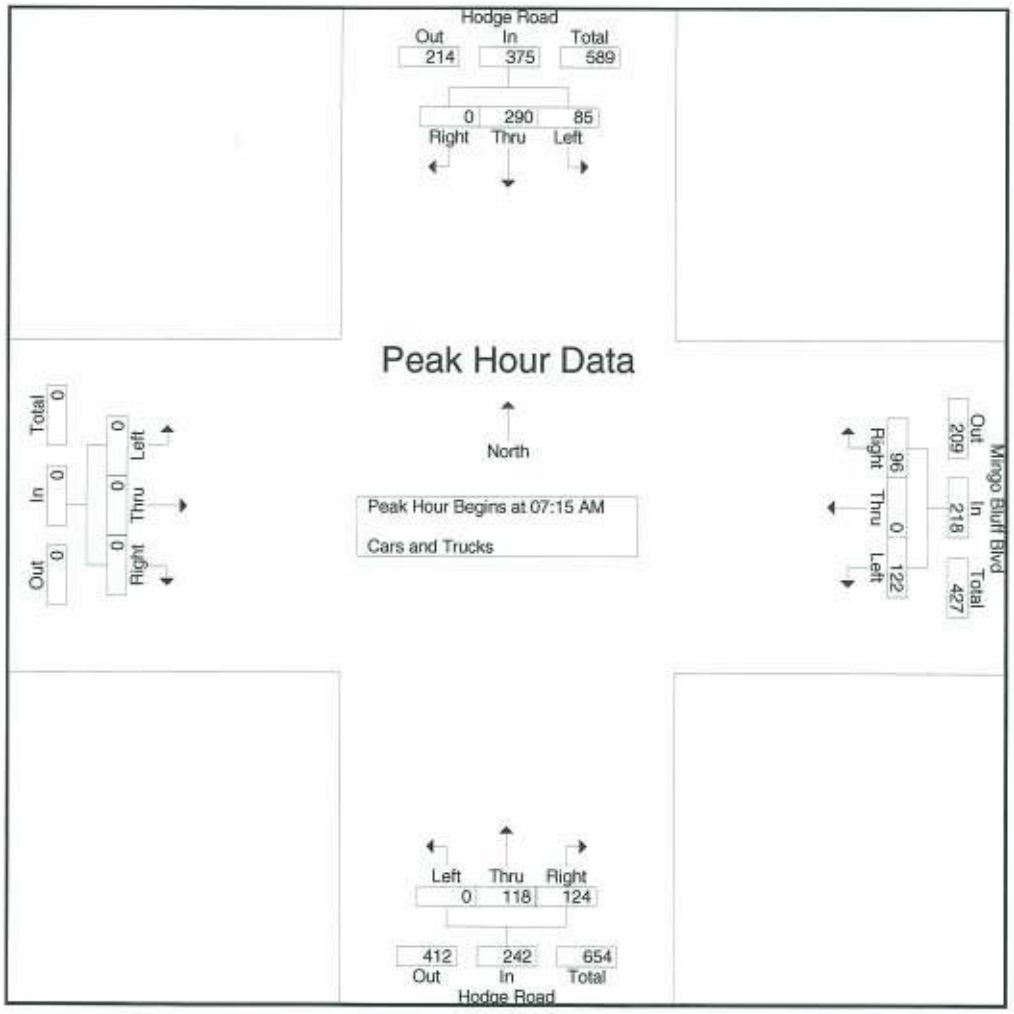
Site Code : 00000002
Start Date : 10/31/2007
Page No : 4

	Hodge Road From North				Mingo Bluff Blvd From East				Hodge Road From South				From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	81	12	93	15	0	23	38	20	24	0	44	0	0	0	0	175
07:30 AM	0	**84**	16	**100**	16	0	21	37	**41**	29	0	**70**	0	0	0	0	207
07:45 AM	0	65	20	85	27	0	**41**	68	34	32	0	66	0	0	0	0	219
08:00 AM	0	60	**37**	97	**38**	0	37	**75**	29	**33**	0	62	0	0	0	0	**234**
Total Volume	0	290	85	375	96	0	122	218	124	118	0	242	0	0	0	0	835
% App. Total	0	77.3	22.7		44	0	56		51.2	48.8	0		0	0	0		
PHF	.000	.863	.574	.938	.632	.000	.744	.727	.756	.894	.000	.864	.000	.000	.000	.000	.892



Wilbur Smith Associates

421 Fayetteville Street, Suite 1303
Raleigh, NC 27601

File Name : HodgeRd_MingoBluffBlvd
Site Code : 00000002
Start Date : 10/31/2007
Page No : 5

	Hodge Road From North				Mingo Bluff Blvd From East				Hodge Road From South				From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	104	26	130	18	0	19	37	27	131	0	158	0	0	0	0	325
05:00 PM	0	111	25	136	19	0	19	38	31	**146**	0	177	0	0	0	0	351
05:15 PM	0	**119**	22	**141**	18	0	24	42	**43**	146	0	**189**	0	0	0	0	372
05:30 PM	0	107	**27**	134	**29**	0	**28**	**57**	39	143	0	182	0	0	0	0	**373**
Total Volume	0	441	100	541	84	0	90	174	140	566	0	706	0	0	0	0	1421
% App. Total	0	81.5	18.5		48.3	0	51.7		19.8	80.2	0		0	0	0		
PHF	.000	.926	.926	.959	.724	.000	.804	.763	.814	.969	.000	.934	.000	.000	.000	.000	.952

Appendix B

CRASH DATA

North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report

Study Criteria Summary

County: WAKE **City:** All and Rural
Date: 7/1/2004 **to** 6/30/2007 **Study:** OLV200711091
Location: SR 2516 (Hodge Rd) from US 64 Bus to SR 1007 (Poole Rd)

Report Details

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
1	101262375	0.000	08/19/2004 06:11	LEFT TURN, SAME ROADWAY	$ 5700	0	0	0	0	1	3	2	1	0	3	1
Unit 1 : 4	Alchl/Drgs: 0	Speed: 50 MPH	Dir: E	Veh Mnvr/Ped Actn: 4	Obj Strk:											
Unit 2 : 1	Alchl/Drgs: 0	Speed: 15 MPH	Dir: W	Veh Mnvr/Ped Actn: 8	Obj Strk:											
2	101262374	0.000	08/19/2004 23:16	REAR END, SLOW OR STOP	$ 2000	0	0	0	2	1	5	1	1	0	3	1
Unit 1 : 2	Alchl/Drgs: 0	Speed: 45 MPH	Dir: E	Veh Mnvr/Ped Actn: 11	Obj Strk:											
Unit 2 : 1	Alchl/Drgs: 0	Speed: 45 MPH	Dir: E	Veh Mnvr/Ped Actn: 1	Obj Strk:											
3	101291851	0.000	09/24/2004 04:50	LEFT TURN, DIFFERENT ROADWAYS	$ 7000	0	0	1	1	1	5	1	1	0	3	1
Unit 1 : 1	Alchl/Drgs: 0	Speed: 50 MPH	Dir: E	Veh Mnvr/Ped Actn: 4	Obj Strk:											
Unit 2 : 2	Alchl/Drgs: 0	Speed: 20 MPH	Dir: N	Veh Mnvr/Ped Actn: 8	Obj Strk:											
4	101294740	0.000	09/27/2004 15:16	ANGLE	$ 6500	0	0	0	2	2	1	2	1	0	3	1
Unit 1 : 4	Alchl/Drgs: 0	Speed: 45 MPH	Dir: E	Veh Mnvr/Ped Actn: 4	Obj Strk:											
Unit 2 : 1	Alchl/Drgs: 0	Speed: 10 MPH	Dir: E	Veh Mnvr/Ped Actn: 8	Obj Strk:											
5	101417503	0.000	02/22/2005 17:41	REAR END, SLOW OR STOP	$ 13000	0	0	0	1	1	1	1	7	0	3	1
Unit 1 : 1	Alchl/Drgs: 0	Speed: 0 MPH	Dir: W	Veh Mnvr/Ped Actn: 1	Obj Strk:											
Unit 2 : 1	Alchl/Drgs: 0	Speed: 25 MPH	Dir: W	Veh Mnvr/Ped Actn: 11	Obj Strk:											
6	101335653	0.000	04/09/2005 09:50	REAR END, SLOW OR STOP	$ 1000	0	0	0	1	1	1	1	1	0	3	1
Unit 1 : 1	Alchl/Drgs: 0	Speed: 45 MPH	Dir: W	Veh Mnvr/Ped Actn: 4	Obj Strk:											
Unit 2 : 1	Alchl/Drgs: 0	Speed: 45 MPH	Dir: W	Veh Mnvr/Ped Actn: 1	Obj Strk:											
7	101468068	0.000	05/03/2005 19:02	REAR END, SLOW OR STOP	$ 6000	0	0	0	0	1	1	1		0		
Unit 1 : 1	Alchl/Drgs: 0	Speed: 0 MPH	Dir: E	Veh Mnvr/Ped Actn: 11	Obj Strk:											
Unit 2 : 1	Alchl/Drgs: 0	Speed: 0 MPH	Dir: E	Veh Mnvr/Ped Actn: 4	Obj Strk:											
8	101541281	0.000	11/18/2005 22:15	REAR END, SLOW OR STOP	$ 800	0	0	0	0	1	5	1	1	0	3	1
Unit 1 : 4	Alchl/Drgs: 1	Speed: 50 MPH	Dir: E	Veh Mnvr/Ped Actn: 4	Obj Strk:											
Unit 2 : 1	Alchl/Drgs: 0	Speed: 35 MPH	Dir: E	Veh Mnvr/Ped Actn: 1	Obj Strk:											

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
9	**101684350**	0.000	02/24/2006 14:36	REAR END, SLOW OR STOP	$ 4000	0	0	0	0	1	1	1	1	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
Unit 2 : 2	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
Unit 3 : 1	**Alchl/Drgs:** 0	**Speed:** 50 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
10	**101833733**	0.000	09/16/2006 15:50	REAR END, SLOW OR STOP	$ 6000	0	0	0	0	1	1	1	1	0	3	1
Unit 1 : 2	**Alchl/Drgs:** 1	**Speed:** 45 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
11	**101862927**	0.000	12/10/2006 15:31	REAR END, SLOW OR STOP	$ 450	0	0	0	2	1	1	1	3	11	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
12	**102061636**	0.000	02/11/2007 17:25	REAR END, SLOW OR STOP	$ 3400	0	0	0	3	1	1	1	1	0	3	1
Unit 1 : 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
Unit 2 : 2	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
Unit 3 : 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
Unit 4 : 1	**Alchl/Drgs:** 1	**Speed:** 30 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
13	**101664711**	0.002	01/26/2006 20:30	RAN OFF ROAD - RIGHT	$ 150	0	0	0	0	1	4	1	1	1		
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 16	**Obj Strk:**											
14	**102030704**	0.002	05/04/2007 16:22	REAR END, SLOW OR STOP	$ 2300	0	0	0	2	2	1	3	5	0	3	1
Unit 1 : 4	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
15	**101938471**	0.007	01/15/2007 13:41	REAR END, TURN	$ 6000	0	0	0	1	1	1	1	5	0	3	1
Unit 1 : 2	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
16	**101265584**	0.041	08/23/2004 06:17	LEFT TURN, SAME ROADWAY	$ 4500	0	0	0	0	1	1	1	5	0	0	
Unit 1 : 5	**Alchl/Drgs:** 0	**Speed:** 25 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 2	**Alchl/Drgs:** 0	**Speed:** 25 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**											
17	**101281666**	0.210	09/12/2004 20:00	RIGHT TURN, DIFFERENT ROADWAYS	$ 830	0	0	1	0	1	5	1	1	0	0	
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
Unit 2 : 1	Alchl/Drgs: 0	Speed: 5 MPH	Dir: SE	Veh Mnvr/Ped Actn: 7	Obj Strk:											
18	**101544363**	0.430	08/17/2005 07:47	SIDESWIPE, SAME DIRECTION	$ 1000	0	0	0	0	1	1	2	1	0	13	1
Unit 1 : 1	Alchl/Drgs: 0	Speed: 45 MPH	Dir: S	Veh Mnvr/Ped Actn: 4	Obj Strk:											
Unit 2 : 32	Alchl/Drgs: 7	Speed: 15 MPH	Dir: S	Veh Mnvr/Ped Actn: 4	Obj Strk:											
19	**102066964**	0.710	06/16/2007 14:55	REAR END, SLOW OR STOP	$ 6500	0	0	0	2	1	1	1	1	0	13	1
Unit 1 : 4	Alchl/Drgs: 0	Speed: 45 MPH	Dir: S	Veh Mnvr/Ped Actn: 4	Obj Strk:											
Unit 2 : 1	Alchl/Drgs: 0	Speed: 0 MPH	Dir: S	Veh Mnvr/Ped Actn: 1	Obj Strk:											
20	**101945975**	0.810	01/26/2007 19:16	REAR END, SLOW OR STOP	$ 3000	0	0	0	1	1	5	1	7	0	13	1
Unit 1 : 2	Alchl/Drgs: 0	Speed: 45 MPH	Dir: S	Veh Mnvr/Ped Actn: 4	Obj Strk:											
Unit 2 : 1	Alchl/Drgs: 0	Speed: 0 MPH	Dir: S	Veh Mnvr/Ped Actn: 1	Obj Strk:											
21	**101998502**	1.000	03/22/2007 17:15	REAR END, SLOW OR STOP	$ 5000	0	0	0	0	1	1	1	1	0	13	1
Unit 1 : 2	Alchl/Drgs: 0	Speed: 45 MPH	Dir: S	Veh Mnvr/Ped Actn: 4	Obj Strk:											
Unit 2 : 1	Alchl/Drgs: 0	Speed: 45 MPH	Dir: S	Veh Mnvr/Ped Actn: 1	Obj Strk:											
Unit 3 : 1	Alchl/Drgs: 0	Speed: 45 MPH	Dir: S	Veh Mnvr/Ped Actn: 1	Obj Strk:											
22	**101868834**	1.003	10/27/2006 15:56	FIXED OBJECT	$ 1250	0	0	0	0	2	1	3	7	0	0	
Unit 1 : 1	Alchl/Drgs: 1	Speed: 45 MPH	Dir: S	Veh Mnvr/Ped Actn: 4	Obj Strk: 37											
23	**101322587**	1.010	10/30/2004 13:30	ANGLE	$ 3000	0	0	0	0	1	1	1	1	0	1	1
Unit 1 : 1	Alchl/Drgs: 0	Speed: 15 MPH	Dir: W	Veh Mnvr/Ped Actn: 4	Obj Strk:											
Unit 2 : 1	Alchl/Drgs: 0	Speed: 45 MPH	Dir: S	Veh Mnvr/Ped Actn: 4	Obj Strk:											
24	**101452544**	1.010	04/10/2005 07:40	ANGLE	$ 2000	0	0	0	0	1	1	1	1	0	1	1
Unit 1 : 1	Alchl/Drgs: 0	Speed: 10 MPH	Dir: E	Veh Mnvr/Ped Actn: 4	Obj Strk:											
Unit 2 : 2	Alchl/Drgs: 0	Speed: 50 MPH	Dir: N	Veh Mnvr/Ped Actn: 4	Obj Strk:											
25	**101723109**	1.010	04/26/2006 16:50	ANGLE	$ 5000	0	0	0	3	2	2	3	5	0	1	1
Unit 1 : 1	Alchl/Drgs: 0	Speed: 10 MPH	Dir: E	Veh Mnvr/Ped Actn: 4	Obj Strk:											
Unit 2 : 1	Alchl/Drgs: 0	Speed: 40 MPH	Dir: S	Veh Mnvr/Ped Actn: 4	Obj Strk:											
26	**101822963**	1.010	09/02/2006 21:49	LEFT TURN, SAME ROADWAY	$ 6125	0	0	0	0	1	5	1	1	0	13	1
Unit 1 : 5	Alchl/Drgs: 0	Speed: 15 MPH	Dir: S	Veh Mnvr/Ped Actn: 8	Obj Strk:											
Unit 2 : 5	Alchl/Drgs: 0	Speed: 35 MPH	Dir: N	Veh Mnvr/Ped Actn: 4	Obj Strk:											

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
27	**101292469**	1.029	02/22/2005 07:50	REAR END, SLOW OR STOP	$ 5200	0	0	0	2	1	1	5	5	0	0	
Unit 1 : 10	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
28	**101423638**	1.031	07/14/2005 20:32	FIXED OBJECT	$ 8125	0	0	1	0	2	5	2	5	0	13	1
Unit 1 : 4	**Alchl/Drgs:** 1	**Speed:** 55 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 60											
29	**101803104**	1.300	08/08/2006 17:12	LEFT TURN, SAME ROADWAY	$ 3500	0	0	0	0	1	1	2	3	0		
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 2	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
30	**101934964**	1.300	01/09/2007 18:14	ANIMAL	$ 2000	0	0	0	0	1	5	1	3	0	13	1
Unit 1 : 5	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 17											
31	**101579440**	1.376	10/07/2005 14:53	REAR END, SLOW OR STOP	$ 2000	0	0	0	0	2	1	3	1	0	6	2
Unit 1 : 4	**Alchl/Drgs:** 0	**Speed:** 352 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 4	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**											
32	**101760961**	1.380	06/18/2006 11:52	RAN OFF ROAD - LEFT	$ 5000	0	0	1	0	1	1	1	4	0	6	2
Unit 1 : 4	**Alchl/Drgs:** 0	**Speed:** 42 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 33											
33	**101882195**	1.800	11/09/2006 07:01	ANIMAL	$ 500	0	0	0	0	1	1	1	1	0	0	
Unit 1 : 5	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 17											
34	**101824167**	1.900	09/04/2006 04:36	FIXED OBJECT	$ 4000	0	0	0	0	1	5	1	3	0		
Unit 1 : 1	**Alchl/Drgs:** 1	**Speed:** 50 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 33											
35	**101825614**	1.950	09/06/2006 09:43	OVERTURN/ROLLOVER	$ 12000	0	0	0	0	2	1	2	1	0	13	1
Unit 1 : 11	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
36	**101315039**	2.140	10/22/2004 01:01	ANIMAL	$ 1500	0	0	0	0	1	5	1		0		
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 17											
37	**102057635**	2.212	06/03/2007 05:13	RAN OFF ROAD - RIGHT	$ 2300	0	0	0	0	2	1	3	7	0	13	1
Unit 1 : 2	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 58											

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Cl	Trfc Ctl Dv	Op
38	**101562465**	2.250	09/15/2005 11:35	ANGLE	$ 4650	0	0	0	1	1	1	1	3	0	3	1
Unit 1 : 11	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 4	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
39	**101884998**	2.250	11/12/2006 10:54	LEFT TURN, SAME ROADWAY	$ 16000	0	0	2	0	2	1	2	3	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
40	**101897502**	2.269	11/26/2006 18:46	REAR END, SLOW OR STOP	$ 1000	0	0	1	0	1	5	1	3	0		
Unit 1 : 32	**Alchl/Drgs:** 7	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
41	**101246622**	2.300	12/27/2004 17:45	REAR END, SLOW OR STOP	$ 5500	0	0	0	0	4	5	1	3	0	13	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 20 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 3 : 4	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
42	**101291838**	2.457	09/24/2004 02:54	FIXED OBJECT	$ 4000	0	0	0	0	1	5	1	1	0	13	1
Unit 1 : 4	**Alchl/Drgs:** 7	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 58											
43	**101294159**	2.550	09/27/2004 15:48	REAR END, SLOW OR STOP	$ 1000	0	0	0	0	2	1	2	2	0	13	1
Unit 1 : 12	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
44	**101300583**	2.550	10/04/2004 22:45	ANIMAL	$ 1200	0	0	0	0	1	3	5	1	0		
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:** 17											
45	**101726390**	2.600	05/03/2006 15:11	REAR END, TURN	$ 6600	0	0	0	2	1	1	1	1	0	13	1
Unit 1 : 4	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 7	**Obj Strk:** 60											
46	**101346007**	2.640	11/25/2004 19:39	ANIMAL	$ 500	0	0	0	0	1	5	1		0		
Unit 1 : 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 17											
47	**101303128**	2.650	10/07/2004 09:17	MOVABLE OBJECT	$ 800	0	0	0	0	1	1	1	3	0	13	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 18											

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
48	**101287116**	2.780	09/18/2004 09:20	ANGLE	$ 1000	0	0	1	1	2	1	2	1	0	13	1
Unit 1 : 20	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
49	**101836203**	2.788	09/20/2006 07:30	REAR END, SLOW OR STOP	$ 3000	0	0	0	0	1	1	1	1	0	13	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
50	**101764202**	2.930	06/18/2006 02:26	ANIMAL	$ 1000	0	0	0	0	1	5	1		0		
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 17											
51	**101225726**	2.940	07/02/2004 11:42	FIXED OBJECT	$ 2580	0	0	0	0	1	1	1	5	0	0	
Unit 1 : 5	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 60											
52	**101834735**	3.040	09/18/2006 02:56	FIXED OBJECT	$ 3500	0	0	0	0	1	5	1	5	0	13	1
Unit 1 : 1	**Alchl/Drgs:** 7	**Speed:** 55 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 58											
53	**101399224**	3.138	01/30/2005 11:21	REAR END, SLOW OR STOP	$ 350	0	0	0	0	1	1	2	1	0	3	1
Unit 1 : 4	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
54	**101699081**	3.138	03/20/2006 13:00	REAR END, SLOW OR STOP	$ 125	0	0	0	0	1	1	1	1	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
Unit 2 : 2	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
55	**101270376**	3.140	08/29/2004 21:08	SIDESWIPE, OPPOSITE DIRECTION	$ 3500	0	0	0	0	1	1	1	1	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:** 7	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 3 : 5	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
56	**101301408**	3.140	10/05/2004 07:40	LEFT TURN, DIFFERENT ROADWAYS	$ 2200	0	0	0	0	1	1	1	1	0	3	1
Unit 1 : 7	**Alchl/Drgs:** 0	**Speed:** 20 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
57	**101410129**	3.140	02/14/2005 08:09	RIGHT TURN, DIFFERENT ROADWAYS	$ 4500	0	0	0	0	1	1	2	2	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 7	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
58	**101420116**	3.140	02/25/2005 18:25	LEFT TURN, SAME ROADWAY	$ 5500	0	0	3	0	1	5	1	3	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
59	**101480829**	3.140	05/20/2005 18:40	REAR END, SLOW OR STOP	$ 4350	0	0	0	0	2	2	2	2	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
60	**101652686**	3.140	01/09/2006 19:21	LEFT TURN, DIFFERENT ROADWAYS	$ 7000	0	0	1	1	1	5	1	1	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
61	**101702751**	3.140	03/23/2006 06:49	LEFT TURN, DIFFERENT ROADWAYS	$ 4000	0	0	0	0	1	1	1	1	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**											
Unit 2 : 4	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 33											
62	**101767338**	3.140	06/22/2006 17:45	ANGLE	$ 1600	0	0	0	0	1	1	1	1	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 20 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
63	**101858129**	3.140	10/16/2006 05:45	OTHER NON-COLLISION	$ 1000	0	0	0	0	1	5	2	1	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** SE	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**											

Legend for Report Details:

Acc No - Accident Number
Injuries: F - Fatal, A - Class A, B - Class B, C - Class C
Condition: R - Road Surface, L - Ambient Light, W - Weather
Rd Ch - Road Character
Rd Ci - Roadway Contributing Circumstances
Trfc Ctl - Traffic Control: Dv - Device, Op - Operating
Alchl/Drgs - Alcohol Drugs Suspected
Veh Mnvr/Ped Actn - Vehicle Maneuver/Pedestrian Action
Obj Strk - Object Struck

Summary Statistics

High Level Crash Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	63	100.00
Fatal Crashes	0	0.00
Non-Fatal Injury Crashes	23	36.51
Total Injury Crashes	23	36.51
Property Damage Only Crashes	40	63.49
Night Crashes	20	31.75
Wet Crashes	12	19.05
Alcohol/Drugs Involvement Crashes	6	9.52

Crash Severity Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	63	100.00
Fatal Crashes	0	0.00
Class A Crashes	0	0.00
Class B Crashes	9	14.29
Class C Crashes	14	22.22
Property Damage Only Crashes	40	63.49

Vehicle Exposure Statistics

Annual ADT = 6400

Total Length = 3.14 (Miles) 5.053 (Kilometers)

Total Vehicle Exposure = 22.01 (MVMT) 35.41 (MVKMT)

Crash Rate	Crashes Per 100 Million Vehicle Miles	Crashes Per 100 Million Vehicle Kilometers
Total Crash Rate	286.30	177.90
Fatal Crash Rate	0.00	0.00
Non Fatal Crash Rate	104.52	64.95
Night Crash Rate	90.89	56.48
Wet Crash Rate	54.53	33.89
EPDO Rate	1059.75	658.50

Miscellaneous Statistics

Severity Index =	3.70
EPDO Crash Index =	233.20
Estimated Property Damage Total = $	235085.00

Accident Type Summary

Accident Type	Number of Crashes	Percent of Total
ANGLE	7	11.11
ANIMAL	6	9.52
FIXED OBJECT	6	9.52
LEFT TURN, DIFFERENT ROADWAYS	4	6.35
LEFT TURN, SAME ROADWAY	6	9.52
MOVABLE OBJECT	1	1.59
OTHER NON-COLLISION	1	1.59
OVERTURN/ROLLOVER	1	1.59
RAN OFF ROAD - LEFT	1	1.59
RAN OFF ROAD - RIGHT	2	3.17
REAR END, SLOW OR STOP	22	34.92
REAR END, TURN	2	3.17
RIGHT TURN, DIFFERENT ROADWAYS	2	3.17
SIDESWIPE, OPPOSITE DIRECTION	1	1.59
SIDESWIPE, SAME DIRECTION	1	1.59

Injury Summary

Injury Type	Number of Injuries	Percent of Total
Fatal Injuries	0	0.00
Class A Injuries	0	0.00
Class B Injuries	12	30.00
Class C Injuries	28	70.00
Total Non-Fatal Injuries	40	100.00
Total Injuries	40	100.00

Monthly Summary

Month	Number of Crashes	Percent of Total
Jan	6	9.52
Feb	6	9.52
Mar	3	4.76
Apr	3	4.76
May	4	6.35
Jun	5	7.94
Jul	2	3.17
Aug	6	9.52
Sep	13	20.63
Oct	8	12.70
Nov	5	7.94
Dec	2	3.17

Daily Summary

Day	Number of Crashes	Percent of Total
Mon	12	19.05
Tue	6	9.52
Wed	5	7.94
Thu	11	17.46
Fri	12	19.05
Sat	6	9.52
Sun	11	17.46

Hourly Summary

Hour	Number of Crashes	Percent of Total
0000-0059	0	0.00
0100-0159	1	1.59
0200-0259	3	4.76
0300-0359	0	0.00
0400-0459	2	3.17
0500-0559	2	3.17
0600-0659	3	4.76
0700-0759	6	9.52
0800-0859	1	1.59
0900-0959	4	6.35
1000-1059	1	1.59
1100-1159	4	6.35
1200-1259	0	0.00
1300-1359	3	4.76
1400-1459	3	4.76
1500-1559	6	9.52
1600-1659	2	3.17
1700-1759	6	9.52
1800-1859	4	6.35
1900-1959	4	6.35
2000-2059	3	4.76
2100-2159	2	3.17
2200-2259	2	3.17
2300-2359	1	1.59

Light and Road Conditions Summary

Condition	Dry	Wet	Other	Total
Day	30	9	0	39
Dark	18	1	1	20
Other	2	2	0	4
Total	50	12	1	63

Object Struck Summary

Object Type	Times Struck	Percent of Total
ANIMAL	6	35.29
DITCH	3	17.65
MAILBOX	3	17.65
MOVABLE OBJECT	1	5.88
OFFICIAL HIGHWAY SIGN NON-BREAKAWAY	1	5.88
TREE	3	17.65

Vehicle Type Summary

Vehicle Type	Number Involved	Percent of Total
MOTORCYCLE	1	0.87
PASSENGER CAR	69	60.00
PICKUP	12	10.43
SCHOOL BUS	1	0.87
SINGLE UNIT TRUCK (2-AXLE, 6-TIRE)	1	0.87
SINGLE UNIT TRUCK (3 OR MORE AXLES)	2	1.74
SPORT UTILITY	19	16.52
TRUCK/TRAILER	1	0.87
UNKNOWN	2	1.74
VAN	7	6.09

Yearly Totals Summary

Accident Totals

Year	Total Accidents	Fatal Accidents	Injury Accidents	Property Damage Only Accidents
2004	18	0	5	13
2005	14	0	6	8
2006	23	0	7	16
2007	8	0	5	3
Total	63	0	23	40

Injury Totals

Year	Fatal Injuries	Class A, B, or C Injuries
2004	0	9
2005	0	9
2006	0	13
2007	0	9
Total	0	40

Miscellaneous Totals

Year	Property Damage	EPDO Index
2004	$ 53310	55.00
2005	$ 58475	58.40
2006	$ 92800	74.80
2007	$ 30500	45.00
Total	$ 235085	233.20

Type of Accident Totals

Year	Left Turn	Right Turn	Rear End	Run Off Road & Fixed Object	Angle	Side Swipe	Other
2004	4	1	3	2	3	1	4
2005	1	1	8	1	2	1	0
2006	5	0	7	5	2	0	4
2007	0	0	6	1	0	0	1
Total	10	2	24	9	7	2	9

Strip Diagram

Features	Milepost	Crash IDs
US 64 BUSINESS | US 64	0.000	101262375 | 101262374 | 101291851 | 101294740 | 101417503 | 101335653 | 101468068 | 101541281 | 101684350 | 101833733 | 101862927 | 102061636 | 101664711 | 102030704
	0.010	101938471
	0.020	
	0.030	
	0.040	101265584
	0.050	
	0.060	
	0.070	
	0.080	
	0.090	
	0.100	
	0.110	
	0.120	
SR 2590 | SATTERWHITE	0.130	
	0.140	
	0.150	
	0.160	
SR 2576 | DANIEL	0.170	
	0.180	
	0.190	
	0.200	
SR 2592 | GREEN	0.210	101281666
	0.220	
	0.230	
	0.240	
SR 2576 | DANIEL	0.250	
	0.260	
	0.270	
	0.280	
	0.290	
	0.300	
	0.310	
	0.320	
SR 2593 | WHITFIELD	0.330	
	0.340	
	0.350	
	0.360	
	0.370	
	0.380	

Features	Milepost	Crash IDs
	0.390	
	0.400	
	0.410	
	0.420	
	0.430	101544363
	0.440	
	0.450	
	0.460	
	0.470	
	0.480	
	0.490	
	0.500	
	0.510	
	0.520	
	0.530	
	0.540	
	0.550	
NEEDWILL	0.560	
	0.570	
	0.580	
	0.590	
	0.600	
	0.610	
	0.620	
	0.630	
	0.640	
	0.650	
	0.660	
	0.670	
	0.680	
	0.690	
	0.700	
	0.710	102066964
	0.720	
	0.730	
	0.740	
	0.750	
SR 4188 | DIANE	0.760	
	0.770	
	0.780	
	0.790	
	0.800	
SR 2619 | LINWOOD	0.810	101945975
	0.820	
	0.830	
	0.840	

Features	Milepost	Crash IDs
	0.850	
	0.860	
	0.870	
	0.880	
	0.890	
	0.900	
	0.910	
SR 2620 | EVELYN	0.920	
	0.930	
	0.940	
	0.950	
	0.960	
	0.970	
	0.980	
	0.990	
	1.000	101998502 | 101868834
SR 2621 | SR 2659 | MERLIN	1.010	101322587 | 101452544 | 101723109 | 101822963
	1.020	
	1.030	101292469 | 101423638
	1.040	
	1.050	
	1.060	
	1.070	
	1.080	
	1.090	
SR 2619 | LINWOOD	1.100	
	1.110	
	1.120	
	1.130	
	1.140	
	1.150	
	1.160	
	1.170	
	1.180	
	1.190	
PRINCETON PARK	1.200	
	1.210	
	1.220	
	1.230	
	1.240	
	1.250	
	1.260	
	1.270	
	1.280	
	1.290	
PRINCETON TOWN	1.300	101803104 | 101934964

Features	Milepost	Crash IDs
	1.310	
	1.320	
	1.330	
	1.340	
	1.350	
	1.360	
	1.370	
Railroad Crossing:465686Y	1.380	101579440 | 101760961
	1.390	
	1.400	
	1.410	
	1.420	
	1.430	
	1.440	
	1.450	
	1.460	
	1.470	
	1.480	
	1.490	
	1.500	
	1.510	
	1.520	
	1.530	
	1.540	
	1.550	
	1.560	
	1.570	
	1.580	
	1.590	
	1.600	
	1.610	
	1.620	
	1.630	
	1.640	
	1.650	
	1.660	
	1.670	
	1.680	
	1.690	
	1.700	
	1.710	
	1.720	
	1.730	
	1.740	
	1.750	
	1.760	

Features	Milepost	Crash IDs
	1.770	
	1.780	
	1.790	
MINGO BLUFF	1.800	101882195
	1.810	
	1.820	
	1.830	
	1.840	
	1.850	
	1.860	
	1.870	
	1.880	
	1.890	
	1.900	101824167
	1.910	
	1.920	
	1.930	
	1.940	
	1.950	101825614
	1.960	
	1.970	
	1.980	
	1.990	
	2.000	
	2.010	
	2.020	
	2.030	
	2.040	
	2.050	
	2.060	
	2.070	
	2.080	
	2.090	
US 64 BYPASS	2.100	
	2.110	
	2.120	
	2.130	
	2.140	101315039
	2.150	
	2.160	
	2.170	
	2.180	
	2.190	
	2.200	
	2.210	102057635
	2.220	

Features	Milepost	Crash IDs
	2.230	
	2.240	
SR 2515 | OLD FAISON	2.250	101562465 | 101884998
	2.260	
	2.270	101897502
	2.280	
	2.290	
	2.300	101246622
	2.310	
	2.320	
	2.330	
SR 2577 | ELLEN	2.340	
	2.350	
	2.360	
	2.370	
	2.380	
	2.390	
	2.400	
	2.410	
	2.420	
	2.430	
TOWLER	2.440	
	2.450	
	2.460	101291838
	2.470	
	2.480	
	2.490	
	2.500	
	2.510	
	2.520	
	2.530	
	2.540	
	2.550	101294159 | 101300583
	2.560	
	2.570	
	2.580	
	2.590	
	2.600	101726390
	2.610	
	2.620	
	2.630	
	2.640	101346007
	2.650	101303128
	2.660	
	2.670	

Features	Milepost	Crash IDs
	2.680	
	2.690	
	2.700	
	2.710	
	2.720	
	2.730	
	2.740	
	2.750	
	2.760	
	2.770	
KEMP	2.780	101287116
	2.790	101836203
	2.800	
	2.810	
	2.820	
	2.830	
	2.840	
	2.850	
	2.860	
	2.870	
	2.880	
	2.890	
	2.900	
	2.910	
	2.920	
	2.930	101764202
	2.940	101225726
	2.950	
	2.960	
	2.970	
	2.980	
	2.990	
	3.000	
	3.010	
	3.020	
	3.030	
	3.040	101834735
	3.050	
	3.060	
	3.070	
	3.080	
	3.090	
	3.100	
	3.110	
	3.120	
	3.130	

Features	Milepost	Crash IDs
SR 1007 | POOLE	3.140	101399224 | 101699081 | 101270376 | 101301408 | 101410129 | 101420116 | 101480829 | 101652686 | 101702751 | 101767338 | 101858129

Study Criteria

Study Name	Log No.	PH No.	TIP No.	K/A Cf.	B/C Cf.	ADT	ADT Route
OLV200711091	200711091			76.8	8.4	6400	40002516

Request Date	Courier Service	Phone No.	Ext.	Fax No.
11/01/2007		919-755-0583		919-832-8798

County			Municipality					
Name	Code	Div.	Name	Code	Y-Line Ft.	Begin Date	End Date	Years
WAKE	91	5	All and Rural		0	7/1/2004	6/30/2007	3.00

Location Text

SR 2516 (Hodge Rd) from US 64 Bus to SR 1007 (Poole Rd)

Requestor

Matt Pickens, EI
Wilbur Smith Associates
Raleigh, NC 27601

Included Accidents	Old MP	New MP	Type
101265584	0	0.041	R
101291838		2.457	I
101300583		2.55	I
101303128	2.25	2.65	R
101399224	3.14	3.138	R
101541281		0	I
101579440		1.376	I
101664711		0.002	I
101684350		0	I
101699081	0	3.138	R
101726390	0	2.6	R
101760961		1.38	I
101764202	0.83	2.93	R
101803104		1.3	I
101824167	0	1.9	R
101834735	3.14	3.04	R
101862927		0	I
101882195		1.8	I
101934964	0	1.3	R
101938471		0.007	I
101998502		1	I
102030704		0.002	I
102057635		2.212	I
102061636		0	I

Excluded Accidents
101246005
101246029
101374764
101508747
101587844
101703641
101410172
101346879
101374779
101797512
101901676

Fiche Roads

Name	Code
SR 2516	40002516
HODGE	50014128

Strip Road

Name	Code	Begin MP	End MP	Miles	Kilometers
SR 2516	40002516	0.000	3.140	3.140	5.053

North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Fiche, Intersection, and Strip Reports Code Index

T - Type of Accident Codes

0 = UNKNOWN
1 = RAN OFF ROAD - RIGHT
2 = RAN OFF ROAD - LEFT
3 = RAN OFF ROAD - STRAIGHT
4 = JACKKNIFE
5 = OVERTURN/ROLLOVER
13 = OTHER NON-COLLISION
14 = PEDESTRIAN
15 = PEDALCYCLIST
16 = RR TRAIN, ENGINE
17 = ANIMAL
18 = MOVABLE OBJECT
19 = FIXED OBJECT
20 = PARKED MOTOR VEHICLE
21 = REAR END, SLOW OR STOP
22 = REAR END, TURN
23 = LEFT TURN, SAME ROADWAY
24 = LEFT TURN, DIFFERENT ROADWAYS
25 = RIGHT TURN, SAME ROADWAY
26 = RIGHT TURN, DIFFERENT ROADWAYS
27 = HEAD ON
28 = SIDESWIPE, SAME DIRECTION
29 = SIDESWIPE, OPPOSITE DIRECTION
30 = ANGLE
31 = BACKING UP
32 = OTHER COLLISION WITH VEHICLE

F - Road Feature Codes

0 = NO SPECIAL FEATURE
1 = BRIDGE
2 = BRIDGE APPROACH
3 = UNDERPASS
4 = DRIVEWAY, PUBLIC
5 = DRIVEWAY, PRIVATE
6 = ALLEY INTERSECTION
7 = FOUR-WAY INTERSECTION
8 = T-INTERSECTION
9 = Y-INTERSECTION
10 = TRAFFIC CIRCLE/ROUNDABOUT
11 = FIVE-POINT, OR MORE
12 = RELATED TO INTERSECTION
13 = NON-INTERSECTION MEDIAN CROSSING
14 = END OR BEGINNING - DIVIDED HIGHWAY
15 = OFF RAMP ENTRY
16 = OFF RAMP PROPER
17 = OFF RAMP TERMINAL ON CROSSROAD
18 = MERGE LANE BETWEEN ON AND OFF RAMP
19 = ON RAMP ENTRY
20 = ON RAMP PROPER
21 = ON RAMP TERMINAL ON CROSSROAD
22 = RAILROAD CROSSING
23 = TUNNEL
24 = SHARED-USE PATHS OR TRAILS
25 = OTHER

R - Road Condition Codes

1 = DRY
2 = WET
3 = WATER (STANDING, MOVING)
4 = ICE
5 = SNOW
6 = SLUSH
7 = SAND, MUD, DIRT, GRAVEL
8 = FUEL, OIL
9 = OTHER
10 = UNKNOWN

L - Light Condition Codes

1 = DAYLIGHT
2 = DUSK
3 = DAWN
4 = DARK - LIGHTED ROADWAY
5 = DARK - ROADWAY NOT LIGHTED
6 = DARK - UNKNOWN LIGHTING
7 = OTHER
8 = UNKNOWN

W - Weather Condition Codes

1 = CLEAR
2 = CLOUDY
3 = RAIN
4 = SNOW
5 = FOG, SMOG, SMOKE
6 = SLEET, HAIL, FREEZING RAIN/DRIZZLE
7 = SEVERE CROSSWINDS
8 = BLOWING SAND, DIRT, SNOW
9 = OTHER

S - Accident Severity Codes

K = FATAL
A = A-LEVEL INJURY
B = B-LEVEL INJURY
C = C-LEVEL INJURY
O = PROPERTY DAMAGE ONLY

Ch - Road Character

1 = STRAIGHT, LEVEL
2 = STRAIGHT, HILLCREST
3 = STRAIGHT, GRADE
4 = STRAIGHT, BOTTOM (SAG)
5 = CURVE, LEVEL
6 = CURVE, HILLCREST
7 = CURVE, GRADE
8 = CURVE, BOTTOM (SAG)
9 = OTHER

Op - Traffic Control Operating

1 = YES
2 = NO
3 = UNKNOWN

Veh Mnvr - Vehicle Maneuver Codes

1 = STOPPED IN TRAVEL LANE
2 = PARKED OUT OF TRAVEL LANES
3 = PARKED IN TRAVEL LANES
4 = GOING STRAIGHT AHEAD
5 = CHANGING LANES OR MERGING
6 = PASSING
7 = MAKING RIGHT TURN
8 = MAKING LEFT TURN
9 = MAKING U-TURN
10 = BACKING
11 = SLOWING OR STOPPING
12 = STARTING IN ROADWAY
13 = PARKING
14 = LEAVING PARKED POSITION
15 = AVOIDING OBJECT IN ROAD

Dv - Traffic Control Device

0 = NO CONTROL PRESENT
1 = STOP SIGN
2 = YIELD SIGN
3 = STOP AND GO SIGNAL
4 = FLASHING SIGNAL WITH STOP SIGN
5 = FLASHING SIGNAL WITHOUT STOP SIGN
6 = RR GATE AND FLASHER
7 = RR FLASHER
8 = RR CROSSBUCKS ONLY
9 = HUMAN CONTROL
10 = WARNING SIGN
11 = SCHOOL ZONE SIGNS
12 = FLASHING STOP AND GO SIGNAL
13 = DOUBLE YELLOW LINE, NO PASSING ZONE
14 = OTHER

Alchl/Drgs - Driver Alcohol/Drugs Suspected Status Codes

0 = NO
1 = YES - ALCOHOL, IMPAIRMENT SUSPECTED
2 = YES - ALCOHOL, NO IMPAIRMENT DETECTED
3 = YES - OTHER DRUGS, IMPAIRMENT SUSPECTED
4 = YES - OTHER DRUGS, NO IMPAIRMENT DETECTED
5 = YES - ALCOHOL AND OTHER DRUGS, IMPAIRMENT SUSPECTED
6 = YES - ALCOHOL AND OTHER DRUGS, NO IMPAIRMENT DETECTED
7 = UNKNOWN

Ped Actn - Pedestrian Action Codes

1 = ENTERING OR CROSSING SPECIFIED LOCATION
2 = WALKING, RIDING, RUNNING/JOGGING WITH TRAFFIC
3 = WALKING, RIDING, RUNNING/JOGGING AGAINST TRAFFIC
4 = WORKING
5 = PUSHING VEHICLE
6 = APPROACHING OR LEAVING VEHICLE
7 = PLAYING
8 = STANDING
9 = OTHER

Ci - Roadway Contributing Circumstances

0 = NONE (NO UNUSUAL CONDITIONS)
1 = ROAD SURFACE CONDITION
2 = DEBRIS
3 = RUT, HOLES, BUMPS
4 = WORK ZONE (CONSTRUCTION, MAINTENANCE, UTILITY)
5 = WORN TRAVEL-POLISHED SURFACE
6 = OBSTRUCTION IN ROADWAY
7 = TRAFFIC CONTROL DEVICE INOPERATIVE, NOT VISIBLE OR MISSING
8 = SHOULDERS LOW, SOFT OR HIGH
9 = NO SHOULDERS
10 = NON-HIGHWAY WORK
11 = OTHER
12 = UNKNOWN

Obj Strk - Object Struck Codes

14 = PEDESTRIAN
15 = PEDALCYCLIST
17 = ANIMAL
18 = MOVABLE OBJECT
20 = PARKED MOTOR VEHICLE
33 = TREE
34 = UTILITY POLE
35 = LUMINAIRE POLE NON-BREAKAWAY
36 = LUMINAIRE POLE BREAKAWAY
37 = OFFICIAL HIGHWAY SIGN NON-BREAKAWAY
38 = OFFICIAL HIGHWAY SIGN BREAKAWAY
39 = OVERHEAD SIGN SUPPORT
40 = COMMERCIAL SIGN
41 = GUARDRAIL END ON SHOULDER
42 = GUARDRAIL FACE ON SHOULDER
43 = GUARDRAIL END IN MEDIAN
44 = GUARDRAIL FACE IN MEDIAN
45 = SHOULDER BARRIER END
46 = SHOULDER BARRIER FACE
47 = MEDIAN BARRIER END
48 = MEDIAN BARRIER FACE
49 = BRIDGE RAIL END
50 = BRIDGE RAIL FACE
51 = OVERHEAD PART UNDERPASS
52 = PIER ON SHOULDER OF UNDERPASS
53 = PIER IN MEDIAN OF UNDERPASS
54 = ABUTMENT OF UNDERPASS
55 = TRAFFIC ISLAND CURB OR MEDIAN
56 = CATCH BASIN OR CULVERT ON SHOULDER
57 = CATCH BASIN OR CULVERT ON MEDIAN
58 = DITCH
59 = EMBANKMENT
60 = MAILBOX
61 = FENCE OR FENCE POST
62 = CONTRUCTION BARRIER
63 = CRASH CUSHION
64 = OTHER FIXED OBJECT

Unit # - Vehicle Style Codes

1 = PASSENGER CAR
2 = PICKUP
3 = LIGHT TRUCK (MINI-VAN, PANEL)
4 = SPORT UTILITY
5 = VAN
6 = COMMERCIAL BUS
7 = SCHOOL BUS
8 = ACTIVITY BUS
9 = OTHER BUS
10 = SINGLE UNIT TRUCK (2-AXLE, 6-TIRE)
11 = SINGLE UNIT TRUCK (3 OR MORE AXLES)
12 = TRUCK/TRAILER
13 = TRUCK/TRACTOR
14 = TRACTOR/SEMI-TRAILER
15 = TRACTOR/DOULBES
16 = UNKNOWN HEAVY TRUCK
17 = TAXICAB
18 = FARM EQUIPMENT
19 = FARM TRACTOR
20 = MOTORCYCLE
21 = MOPED
22 = MOTOR SCOOTER OR MOTOR BIKE
23 = PEDALCYCLE
24 = PEDESTRIAN
25 = MOTOR HOME/RECREATIONAL VEHICLE
26 = OTHER
27 = ALL TERRAIN VEHICLE (ATV)
28 = FIRETRUCK
29 = EMS VEHICLE, AMBULANCE, RESCUE SQUAD
30 = MILITARY
31 = POLICE
32 = UNKNOWN

Appendix C

SIGNAL WARRANT SPREADSHEET

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS

INTERSECTION NAME: Hodge Road at Mingo Bluff Blvd

COUNT DATE: 10/31/07

INTERSECTION CONDITION: Stop Sign Control

MAJOR STREET: Hodge Road

OF APPROACH LANES: 2

MINOR STREET: Mingo Bluff Blvd

OF APPROACH LANES: 2

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

	MAJOR ST	MINOR ST	WARRANT 1, Condition A			WARRANT 1, Condition B			WARRANT 1, Combination Warrant						WARRANT 2	WARRANT 3
									CONDITION A			CONDITION B				
	BOTH APPROACHES	HIGHEST APPROACH	MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET		
THRESHOLD VALUES →			420	140		630	70		336	112		504	56			
06:00 AM TO 07:00 AM	251	99					Y						Y			
07:00 AM TO 08:00 AM	573	180	Y	Y	**Y**		Y		Y	Y	**Y**	Y	Y	**Y**		
08:00 AM TO 09:00 AM	484	157	Y	Y	**Y**		Y		Y	Y	**Y**		Y			
09:00 AM TO 10:00 AM	283	64											Y			
10:00 AM TO 11:00 AM	284	51														
11:00 AM TO 12:00 PM	266	51														
12:00 PM TO 01:00 PM	296	50														
01:00 PM TO 02:00 PM	341	69							Y				Y			
02:00 PM TO 03:00 PM	778	202	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	**Y**	
03:00 PM TO 04:00 PM	847	270	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	**Y**	**Y**
04:00 PM TO 05:00 PM	1,033	145	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	**Y**	**Y**
05:00 PM TO 06:00 PM	1,108	170	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	**Y**	**Y**
06:00 PM TO 07:00 PM	745	106	Y			Y	Y	**Y**	Y			Y	Y	**Y**		
07:00 PM TO 08:00 PM	664	88	Y			Y	Y	**Y**	Y			Y	Y	**Y**		
08:00 PM TO 09:00 PM	513	45	Y						Y			Y				
09:00 PM TO 10:00 PM	414	36							Y							
	8,880	1,783			**6**			**6**			**6**			**7**	**4**	**3**
			8 HOURS NEEDED **NOT SATISFIED**			8 HOURS NEEDED **NOT SATISFIED**			8 HOURS OF BOTH COND. A AND COND. B NEEDED **NOT SATISFIED**						4 HRS NEEDED **SATISFIED**	1 HR NEEDED **SATISFIED**

WARRANT 1 -- Eight-Hour Vehicular Volume Warrant

Condition A : Minimum Vehicular Volume

Condition B : Interruption of Continuous Traffic

Combination : Combination of Condition A and Condition B

WARRANT 2 -- Four-Hour Vehicular Volume Warrant

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